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ABSTRACT

The Delphi Technique involves getting individuals' reactions by mail to specific questions or statements, combining these reactions and again asking these individuals to review and rank the findings until a priority ranking has been determined. The State Department of Vocational Technical Education used this technique with 103 persons at the state, local, and national levels to assist with the identification of factors to consider in determining the future role of vocational and technical education. The participants were asked to provide 10 possible endings to the following statement: In order to plan vocational and technical education during the decade ahead, the State Department of Vocational and Technical Education should concentrate its resources and energies in the following area... Results of three rankings are presented in the hope that they can be used as input in the planning process. (Author/JS)

OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

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A PLANNING TOOL...

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DELPHI: A PLANNING TOOL

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CHAPTER I

INTRODUCTION

In July, 1970, the State Board for Vocational and Technical Education discussed the role that vocational and technical education would have during the 1970's for the State of Oklahoma. The State Director of Vocational and Technical Education requested the Division of Research, Planning, and Evaluation to determine the direction occupational training should take to most effectively serve Oklahoma in the decade ahead.

The Division of Research, Planning, and Evaluation selected the Delphi Technique as the method to be used to assist with the planning necessary to determine the projected role.

Delphi Technique

The Delphi Technique involves getting individuals' reactions by mail to specific questions or statements, combining these reactions and again asking these individuals to review and rank the findings until a priority ranking has been determined. This technique produces individual and group ideas which the researchers or consultants may use in the most appropriate manner.

The State Department of Vocational and Technical Education proposed to use the Delphi Technique with a limited number of persons at the local, state, and national levels to assist with the identification of factors to consider in determining the future role of vocational and technical education.

Delphi Participants

One hundred and three local, state, and national persons were mailed a correspondence sheet asking them to provide ten possible endings to the following statement:

> In order to plan Vocational and Technical Education during the decade ahead, the State Department of Vocational and Technical Education should concentrate its resources and energies in the following area...

Appendix A, contains (1) a copy of the letter from the State Director of Vocational and Technical Education in Oklahoma introducing the project, (2) a copy of a letter explaining the procedure for each of the participants to follow if they choose to participate in the Delphi Technique, and (3) Correspondence Sheet No. 1 which was the instrument to gather the participants' responses.

The one hundred and three participants that were mailed Correspondence Sheet No. 1 were composed of twenty persons at the national level whose names would be readily recognized in Industry, Business, Education, and Government Services; twenty-five persons from the state level who would be recognized from the categories previously listed; and fifty-eight persons at the local level representing the lay public.

From the one hundred and three persons selected as possible participants sixty-one percent returned Correspondence Sheet No.1. The information was categorized and Correspondence Sheet No.2 (Appendix B) was derived and mailed to the participants asking them to rank the statements on an eleven point continuum. Correspondence Sheet No.2 received a ninety percent return. The statements contained in Correspondence Sheet No.2 could have been combined into broader categories, but it was feared that the participants may have been unable to recognize their individual inputs.

The statements contained in Correspondence Sheet No.2 were ranked to form Correspondence Sheet No.3. The ranked factors were sent to each of the participants asking them to review the rankings, raise or lower any of the factors they felt that were ranked incorrectly. This step completed the participants involvement in the Delphi Technique.

Advisory Consultants

A tentative analysis of the Delphi findings was made, and the State Department of Vocational and Technical Education asked the assistance of four consultants in order to make maximum utilization of the information. The advisory consultant committee was composed of Doctors Walter Arnold, American Vocational Research Corporation; Otto Legg, Senior Program Officer, Division of Vocational and Technical Education, U.S. Office of Education; Chester Swanson, Professor, School of Education Administration, College of Education, University of California at Berkley; and Gordon Swanson, Professor and Coordinator, College of Education, University of Minnesota. A meeting was held in the State Department of Vocational and Technical Education, Stillwater, Oklahoma, February 1 and 2, 1971, and the consultants reviewed the findings and made recommendations as to how the information could be further analyzed.

CHAPTER II

CORRESPONDENCE SHEET NO.1 RESPONSES

The individual responses are presented under the statements derived from the individual responses from Correspondence Sheet No.1.

Select Students for Vocational and Technical Education

1. Promote the stature of the skilled technician in today's society. How many mediocre college graduates would have been superior technicians.
2. Quality and ability of students involved in vocational and technical education.
3. To provide ways and means of screening for selecting vocational education to secondary students, out-of-school students, and adults.
4. To protect the students from being used unwisely in the coming rush to get programs off the ground and grant money working.
5. Develop a means of screening prospective enrollees from areas of society other than public school students.
6. Evaluation of student's potential and counseling about possible fields of study.
7. Aptitude tests for all beginning students.
8. Better selection of trainees.
9. Set up means of determining vocational interests and aptitudes of students interested in vocational education.
10. Find a better tool to use in the selection and placement of students; "GATB" is lacking, but better than nothing.
11. Intensify testing of vocational skills and enlarge counseling technical education abilities.

Guidance and Counseling

1. To provide vocational guidance and counseling services to students in vocational education programs. (comprehensive and intensive)

2. To define, develop, operate, and test the effectiveness of vocational aspects of guidance related to the transition from school to work. (prime goal--big vacuum--neglected area)

3. To define, develop, operate, and test the effectiveness of vocational aspects of guidance in the elementary school.

4. To engender vigorous research to reduce the ambiguities presently smothering guidance and couseling approaches (Theory versus practice, etc.) (Remove the hoax from career planning.)

5. To maintain "guidance for all" in its literal sense.

6. Vocational guidance and couseling for students.

7. Expansion of vocational guidance and counseling.

8. Counseling and guidance system toward occupational goals with emphasis on recruitment into appropriate type of training program.

9. Early identification of vocational aptitudes of pupils in grade and junior high schools.

10. Career counseling of children and their parents toward appropriate vocational and technical education commitments.

11. A testing program to indicate student's aptitude for skills that vo-tech would train them to do.

12. Strengthening vocational counseling which is relevant to world of work and not merely what the average counselor thinks as the world of work.

13. Provide counselors who can steer applicants into areas that meet their particular needs.

14. Provide an occupational testing and counseling program for students and potential students to help them into rewarding and productive vocational fields. Coordinate the vocational and technical education program more closely with high schools. Establish a pre-technical or remedial program for undertrained high school graduates who desire to enroll in full-fledged vo-tech curriculum.

15. Guidance of students in choosing proper career field.

16. Improve vocational counseling and placement identification of students.

17. Set up efficient advisement and counseling services, both occupational and personal.

18. All students should have an advisor to aid them in selecting courses which would help them to best meet their career objectives.

19. Provide an adequate number of properly trained vocational guidance counselors at lower grade levels and high school level so the students (and parents) can have competent career guidance.

20. Need for counselors to coordinate work within individual schools.

21. Increased emphasis on adult education.

22. Coordination of and with industrial arts in making exploratory programs available

23. More emphasis on use of advisory council and committee.

24. Integrating vocational guidance and occupational education.

Placement of Vocational and Technical Trainees

1. Obtain the best possible estimate of position vacancies, current and future, in technical skills within Oklahoma. A full time effective organization is proposed.

2. A placement service or employment facility available only to vocational education graduates.

3. Opportunities offered by vocational and technical education.

4. Planning for greatly improved and intensified occupational guidance and counseling for the initial placement of all students as the completion of their schooling. (Placement might be in a job, or in post-secondary occupational training, or in a four-year college.)

5. Establish adequate placement facilities for students to provide more effective utilization of graduates by Oklahoma industry and to encourage people to pursue vocational technical careers.

6. Develop combination guidance and employment centers at area vocational-technical schools.

7. Vocational curriculum planning that coordinates job entries in Oklahoma with facts regarding the number of eligible people that remain in the state after completion of the program.

8. Follow-up on placement programs.

9. Maintain a thorough follow-up on each graduate in order to learn how well he is performing as a worker. Information gained here should show strengths and weaknesses in the various divisional offerings.

10. Maintain an employment office as a service in helping graduates find jobs.

11. Keep all graduates aware of all new courses available which would be beneficial for increasing their skills.

12. A job placement service for vocational-technical graduates might be considered.

Analyze Current Vocational Offerings in Relationship to Employment Opportunities

1. Survey courses currently offered in vo-tech schools. Continue or establish those that can contribute to filling the existing job vacancies. Discontinue those that do not.

2. Eliminate those courses in areas where positions are traditionally filled by apprenticeships or other effective means.

3. Re-survey the area of data processing and computer programming. Recent national surveys indicate a low percentage placement of graduates.

4. Survey area of service occupations (repair and maintenance of mechanical devices in both home and industry). This area has a definite shortage of available trained people.

5. Continued skills training required in aircraft maintenance jet engine and accessories overhaul, machine tool work, and electrical and electronic repair (installation and test).

6. Work closely with each industry to determine the special needs of that industry.

7. Continuous evaluation of current programs to insure updating.

8. Reassessment of curriculum with eye toward real job demands.

9. More and better courses in drafting.

10. Less stress on the advancement opportunities in electronic data processing.

11. Emphasis on basic vocational-technical skills programs of service and maintenance orientation.

12. Scrutiny of existing programs with help to revamp those that are stale.

13. Continuous research as to the vocational training needs versus availability to meet the needs of business and industry.

14. Establish the characteristics of the entry-level jobs demanded by potential employers.

15. Elimination of conflicts with existing programs. Assistance in upgrading existing programs rather than trying to replace.

16. Close coordination with local, regional, and state employers so that jobs will be available when student is trained. Balance must be achieved between individual desire and needs and employer's needs.

17. Convert vocational agriculture programs into industrial arts programs.

18. Less emphasis on high school vocational agriculture programs.

19. An analysis of current vocational training opportunities and completions in Oklahoma in both private and public institutions.

20. Availability of skill-training in methods and techniques of distribution and marketing particularly for craft workers and those earning livelihoods through these means.

21. Restudy the place of some vo-tech training to academically oriented secondary school administrators.

22. Assistance in upgrading existing programs rather than trying to replace.

23. Determine what jobs are available in certain areas and provide training for the jobs in those particular areas.

24. Training for those jobs that are available or will be available.

25. Delete "requirements" of vocational agriculture and vocational home economics regardless of occupational goals and students.

26. Expand vocational program to cover entire state.

27. Plan for location and availability of vocational-technical schools to include all area of the state.

28. Problem: centered research with assistance to small school districts in this area.

29. Location of training site according to the needs of the community, resources, etc.

30. Improve accessibility to vo-tech education for all students.

31. Continue in efforts to make vo-tech education available to all Oklahoma students regardless of geographic or economical conditions.

32. Continue development of vocational-technical schools so that opportunities are available for all students within reasonable traveling distance.

33. A continuing program of modernizing and expanding the vocational and technical facilities and equipment throughout the state.

34. Establishment of regional schools in each region of Oklahoma so that students may work and commute to schools.

35. Determine actual need for additional vo-tech schools in the area, so that maximum use can be made of present schools.

36. Development of more and larger schools in the Tulsa and Oklahoma City SMSA's.

37. Continued construction of rural area schools.

Follow-up of Vocational Graduates

1. Maintain a follow-up examination of the students product of the vo-tech school to determine that his training permits him to take full advantage of his training.

2. Continuous evaluation of program participants on a longitudinal basis with identified input points for the planning process.

3. Follow-up program on graduates of vocational agricultural programs.

4. Follow-up of vocational graduates.

5. Provide periodic follow-up (evaluation) of persons completing the various training programs.

6. I feel the example given of student follow-up to be quite relevant and important in planning the training to be given.

7. Follow-up of students and general evaluation.

8. Maintain a system of feedback from graduates and employers on curriculum needs and other pertinent factors.

9. Follow-up of graduates and enlist their aid in planning future programs.

10. Develop follow-up programs and evaluative techniques as a continuing modernization process.

11. Communicate with graduates of the program to see if they would choose programs a second time. If not, why?

12. Follow the progress of current vocational-technical school graduates for approximately five years.

13. Student follow-up of vocational program graduates.

14. Job placement and follow-up of performance of graduates.

15. Follow-up technical education students to increase skills of graduates.

16. Maintain a thorough follow-up of each graduate in order to learn how well he is performing as a worker. Information gained here should show strengths and weaknesses in the various divisional offerings.

17. Follow-up on vo-tech grads to determine their ability to do the job based on their training.

18. A continuing program of checking the effectiveness and the quality of instruction provided by a follow-up with graduates and their employers.

19. Survey graduates to evaluate the relevance of courses, both as to salary prospects and job satisfactions.

20. Student follow-up of vocational program graduates.

21. Improved follow-up practices.

22. Student follow-up and placement.

23. Determining Oklahoma's loss of vocational and technical graduates to other states.

24. Student follow-up of vocational program graduates.

Cooperative Vocational and Technical Education

1. Investigate possibility of cooperative training with business and industry outside the school system one-half time in each area.

2. Planning for a large scale expansion of cooperative education programs, in order to make possible a wide variety of offerings in many occupational area without incurring heavy costs for in-school facilities.

3. Provide more training that is job oriented.

4. More coordination with industry for work potential.

5. Seeking cooperation of local industry to incorporate formal vocational training with on-the-job training.

6. Develop work-study program on a coop basis. Where a vo-tech student goes to school one semester then works in the related industry the next semester.

7. Help change citizen attitude toward vo-tech education.

8. Improve the image of vocational and technical education to make it attractive to the many students who would seek career opportunities in the vocational or technical areas, rather than through careers based on a college education.

9. Current occupational information be disseminated in a systematic way utilizing mass media communication methods.

10. Provision of a Public Relations Program to increase understanding of vocational education with the general public as well as prospective employers.

11. Develop a public relation program which will improve the image of skill training for disadvantaged as an attractive and worthwhile profession.

12. Keep business and industrial leaders informed, active, and interested in programs. We must have their support through the knowledge they possess and hopefully their financial support.

13. Educate general public in an effort to improve the image of vocational education.

14. Published research, so that the public will know of the growing needs for funds.

15. Public relations and information program for high school students.

16. Advertise by personal visitation and through the news media to keep the public informed about opportunities available through vo-tech education. Attractive brochures, bulletins, and other printed materials would also be helpful.

17. A coordinated effort on the part of the department and industry to improve the image of vocational and technical education.

18. Effective public relations programs.

19. Development of publications (bulletins, brochures, pamphlets, etc.)

20. Coordination of and with industrial arts in making exploratory programs available.

21. Promotion of vocational programs through mass media.

22. Educate the public concerning needs and opportunities for trained technicians and craftsmen. The necessity of a "college education" has been oversold to the point of pushing some students into colleges who would have gone to a vo-tech school.

23. Report what is being done to add persons involved in business, industry, education, and others.

24. Make the public, and particularly the state leaders, more aware of what has been done in this field to date and what needs and possibilities are in the future.

25. Creating a climate for vocational education.

26. Increase the use of public broadcast (educational) television in vocational and technical education training.

27. Better public relations with other educators

Youth Organization

1. The various activities of vocational youth organizations

2. Increasing emphasis on youth organizations

3. Continued emphasis on competitive events related to vocational education programs.

4. Required participation of vocational students in the youth organizations relating to their area of education and greater development of the practicality and usefulness of these organizations.

5. The State Department should make certain that identifiable relationships exist between occupational study areas and youth organizations.

6. Sessions and seminars and objectives relating to concerns of youth--for instance--what can vocational education do about drug use and abuses?

7. Emphasis of youth leadership.

8. Citizenship and patriotic training.

9. Leadership training.

Post Secondary Vocational Education and/or Technical Training

1. Post secondary vocational education.

2. Review the total picture of post secondary and adult education programs with emphasis on competition for students between area vocational-technical schools and junior colleges.

3. A special course designed for college graduates who feel the need for more skills in their professions.

4. Offer advanced courses in some vocations for graduates.

5. More emphasis on post secondary training with secondary training as feeder to post secondary.

6. Covert two or three of the marginal colleges to residential vocational schools, offering broader programs than would generally be available in the local vo-tech schools.

7. Develop an acceptable uniform procedure whereby post secondary and adult training received in area vocational-technical schools may be transferred to a junior college for advanced standing and/or credit purposes.

8. More encouragement and support of the truly comprehensive community college.

9. Reporting systems which relate to community colleges.

10. Placing of successful graduates into post-graduate opportunities for educational advancement.

11. I believe there is a greater potential for the post-high school program in the area vocational technical school program. How shall these programs be developed to assist the greatest number of students? (Cover by a series of questions.)

12. Technical course work expansion.

13. Survey of availability of post secondary and community college training.

14. Provisions for remedial and basic education for mature individuals.

15. Emphasis on post secondary school programs where applicable.

16. Training and retraining for former student and graduates.

Explore New Fields for Vocational and Technical Training

1. In addition to the basic skills required in item number one, skills should be developed in certain areas in which there is little or no known source of training such as: Digital Computer Devices, Solid State Devices, and Micro-Miniature Circuitry Maintenance.

2. Encourage the initiation of new programs.

3. Plan for the approaching tremendous need for trained people in the field of environment quality control.

4. Methods of developing and supporting innovative programs.

5. Evaluating potential needs of specialized vocational and technical training within the state.

6. Investigate opportunities for training of law enforcement people.

7. Development of courses in home-related arts at the secondary and post secondary levels, to make curricula and training more relevant to employment needs, and to provide for upward mobility.

8. Provide as needed special instructors and special designed courses, etc., to meet needs of new industries moving into the state.

9. Initiation of consideration of contributions vocational or craft skills can make to leisure in a society requiring production (economic) effort from 20%, or less, on the populations.

10. Commercial cooking.

11. Banking.

12. Developing occupational education programs for middle and lower grades.

13. Develop programs which will aid in development of certain abilities which will aid in self-development.

14. Survey the area of general and commercial aviation. Their current and projected growth has and will create a need for training.

15. Give consideration to establishing certain courses to be on the required list for high school students...these courses should stress fundamentals in certain key areas of vocational education (home economics and agriculture).

16. Look into the special skills that might be required as a result of the development of the Arkansas River (Marine Navigation & etc.)

17. Develop student training in the area of small business skills including special training in how and where to obtain resources and how to set up a small business.

Facilities and Equipment for Vocational and Technical Programs

1. Insure that shop layout and equipment relate to local industry will be done by meeting the needs of local industry.

2. Electronics and computer programs should be the best to be had.

3. Maximum use of the facilities available to prevent needless duplication of equipment, services, and funds.

4. Provide suitable physical facilities for vocational education.

5. Provision of specialized guidance and counseling facilities for vocational programs.

6. Visit employers in the state to observe new facilities and processes in order to become better orientated to the education requirements for employment in Oklahoma.

7. Attempt to sight the extremely difficult problem of expensive equipment becoming obsolete. (Maybe lease instead of purchase)

8. Keep all facilities of the physical plant neat, attractive, and in a good state of repair.

9. Inventory equipment in schools to insure that they are not obsolete for the courses--provide for industry cooperation.

10. Annual program for evaluation of equipment and facilities.

11. Consideration of needs within each regional area to determine if existing schools and/or facilities could be used for state programs.

12. Evaluate usage of "equipment pool" equipment. Move, if not being used efficiently. Extensive use of equipment.

13. Moneys for equipment necessary to new programs or to improvement of programs should be made available in advance of the actual offering of programs to students, if possible.

14. A continuing program of modernizing and expanding the vocational and technical facilities and equipment throughout the state.

Recruit Students for Vocational and Technical Program

1. Greater emphasis should be placed on the importance of the availability of the vocational technical schools. This should be accomplished with both student and parent by vocational counseling and by adequate representation on career day.

2. Literature and film for high school students showing present and possible future in vo-tech training.

3. Develop a field service program to work with high school counselors and directly with students that are prospective students for vocational and technical education - a recruitment program.

4. Work toward informing all students of the opportunities in the vocational field.

5. Emphasis on post secondary school programs where applicable and more concerted efforts to recruit high school graduates into these programs.

6. Attempt to draw students to areas needed in training.

7. Upgrade attitudes toward vo-tech education--(not dumb kids).

8. Survey students interests in terms of desired ingredients in vocational studies. It goes without saying that students must be effectively used in curriculum planning.

9. Identification of factors, and their relative influence-power, involved in the choices made by (1) in-school students and (2) immediate high school graduates to pursue or not to pursue occupational education--by categories of students and by categories of occupational education.

10. Strategies of changing the forces, especially the cultural and social ones, currently operating as anti-occupational education determinants; that is, "causing" educational choices other than the pursuit of occupational education. (This research would be largely that of monitoring various styles of action strategies piloted over several years.)

11. Evaluated pilot-testing and refinement of means for recruiting requisite students into occupational education.

12. Recruitment of students for occupational programs.

13. Review annually the overall program to see where students are coming from. When some area or town drops significantly in enrollment determine the reason.

14. Recruiting persons that can profit from the training offered.

15. Develop an aggressive recruiting program and follow-up with an aggressive job placement service for graduates.

Orientation to Employment

1. Vocational program should include an orientation course on real life situation concerning what industry will expect of the graduate and what the graduate can expect of industry.

2. Coordinating vocational and technical education with the programs of the elementary and secondary school especially in the area of developing attitudes and concepts about work and career opportunities.

3. Occupational exploration.

4. Increased emphasis on "job readiness," including self concept, social skills, and attitude toward work with future orientation.

5. Planning and developing programs of broad occupational orientation at the elementary and secondary school levels as to increase student awareness of the range of options open to them in the world of work.

6. Develop contemporary exploratory junior high school industrial arts programs such as the Industrial Arts Curriculum Project.

7. Exposing students to a wide variety of vocational training before specializing in any one area.

8. Orient students for job training.

9. Present greater job related knowledge, such as: Employer requirements and other environmental conditions encountered in employment.

10. Concentrated courses in adjustment of rigors of life in an industrial environment to include goals of the employer.

11. Study ways and means of broadening training courses to include manpower needs "away from home base."

12. Continue efforts to upgrade the status of the world of work.

13. Activities designed to better inform high school students as to the opportunities in, and the necessity of, post secondary vo-tech education for satisfactory entry into the world of work.

14. Manpower skills with good earning potentials.

15. Simulated real life situations to world of work. Examples: "Boss bawls you out." "Co-worker quarrel." "Co-worker absent." etc.

16. All vocational schools should offer a short course on the proper presentation of an individual to a prospective employer when applying for a job.

17. Providing for input by the trainees in interpreting employment statistics.

18. Develop orientation learning kit that will cover what industry expects of an employee.

19. A more complete study of the free enterprise system.

20. Importance of personal character and morals.

21. Importance of willingness to do more than normally expected.

22. Ability to communicate.

23. Meaning of being a good citizen, responsibility to family and others.

24. Knowledge of how to work with other people.

Performance Standards for Vocational and Technical Training Programs

1. The skills program should establish job standards which would incorporate theory and performance. The job standards would include the degree of proficiency the student should attain during the training period and the amount of supervision required in the accomplishment of each job element.

2. The State Department of Vocational and Technical Education should cooperate with the hiring agencies to determine the criteria students must attain to satisfy hiring requirements.

3. Teach for excellence in all areas of vocational and technical education.

4. Teach students marketable skills.

5. Determine on a continuing compatible basis, by type of student and program, cost of program per student.

6. Participation in organized processes for forecasting changes in performance skills and demands for classes of manpower brought on or made possible by technology, or changed manning tables to deliver services.

7. Proper preparation of the student for the jobs to be trained for. Too many students cannot do the work and be of help to the employer until he has been trained on the job.

8. More emphasis on the manual skills.

9. Don't be stereotyped like the public school system; that is, too much time spent on unrealistic and non-related subjects.

10. Emphasis on developing employment-ready individuals as early as possible while retaining high standards of perfection in training.

11. Job-oriented classwork for all sizes of communities.

12. Meaningful and pertinent job preparatory training.

13. Evaluated pilot-testing and refinement of vehicles (e.g., means) for accomplishing occupational needs, especially vehicles other than school-conducted classrooms.

14. Identifying those technical areas and skills that will be most critically needed.

15. Adjust curriculum to meet local industry's priorities first so that the district supporting the school receives the best possible benefits of its tax dollar.

16. Curriculum coordinated to the ever-changing needs of industry.

17. Survey the industrial communities in Oklahoma to assure that the curriculum of the 70's correspond with the needs of industry.

18. Determine training skills needed for these job opportunities.

19. Check vo-ed curricula to see that the employer-required skills are matched by curricula-produced skills.

20. Self-evaluation material that can be used by the teacher and the learner to measure progress.

21. Continue study of firms hiring vo-tech graduates to determine changing skill requirements due to new tools, machines, and techniques; and follow-up by upgrading curriculum and teaching staff.

22. Don't let curriculum become static. It should change to meet the needs of changing times.

23. Develop programs which will aid all people to acquire certain basic skills necessary for general employment.

24. Determine training skills needed for these job opportunities.

25. Direct development of training programs pointed directly at industry needs, i.e., electromechanical maintenance.

Information System for Vocational and Technical Program Planning

1. Developing a state wide reporting, monitoring, and evaluation system that directly provides input to the planning process.

2. Developing a program of research and reporting in the areas of demography, technological changes affecting workers, and attitudes toward work.

3. Developing mechanisms that provide for a variety of inputs including those from industry, participants, unions, trade associations, instructors, and the public in general with provision for public hearing and discussion of projected plans.

4. Be prepared to utilize all information available and to develop new techniques for determining society's needs as well as industry's needs.

5. Determine on a continuing compatible basis, by type of student and program, how many students should be served through vocational programs (demographic, labor market, aspiration, and mobility data).

6. Determine on a continuing compatible basis, by type of student and program, how many students are being served.

7. Develop projections of program operation requirements such as management, preservice and in-service personnel preparation programs, instructional materials and services, facilities, placement and follow-up, etc., if objectives are to be achieved.

8. Make studies of manpower needs and areas of concentration for training programs.

9. Gathering data from a variety of sources concerning the status and trends of the population in Oklahoma; analyzing these data by age groups, by geographic location, by socio-economic characteristics, etc., in order to predict the education needs of the population over the next decade.

10. Current information, education materials and opportunities, newest media.

11. A referral system by the school to supply the specific labor needs of all local industries.

12. Centralized computer data by county and city (over 50,000 population) that shows labor force demand and supply.

Establish Goals and Measurable Objectives

1. Determining the goals and objectives of vocational and technical education for the state.

2. Establish interim and terminal program development objectives for the decade, with time and resources allocation specifications.

3. Set priorities for needed vocations.

4. Collect, tabulate, analyze, and utilize manpower data for formulating measurable, annual, and long-range socioeconomic goals and objectives by geographical areas.

5. Define and write measurable educational and socioeconomic objectives.

6. Identify and interpret the role of vocational education in meeting socioeconomic needs and goals.

Dropouts

1. Technical training for high school dropouts.

2. Studies designed to reduce the relatively high dropout rate of full-time students enrolled in post secondary programs.

3. Survey dropouts for clues to such behavior and attempt to instill pride of work in blue-collar occupations and the knowledge of high salary potential in many of them.

4. Student follow-up of dropouts of vocational programs.

On-the-Job Training

1. Courses for on-the-job training for adults (professional improvements).

2. Survey of possible expansion of apprenticeship training in growing demand areas, for women as well as men.

3. More emphasis on building trades course work and OJT training.

4. Determine the actual training imparted in the apprentice programs of the various construction craft unions; provide as much of this training as possible in the vo-tech institutions; and get the unions to accept graduates as craftsmen or as advanced apprentices (reducing the required apprenticeship time accordingly).

5. Provide more on-the-job training.

6. Actual job placement experience.

7. Develop on-the-job training in relation to the skill program as a pre-employment part of the curriculum with retraining potential, if indicated.

8. Job related training.

Underemployed and Unemployed Individuals

1. Training for unemployed

Flexibility of Vocational and Technical Programs

1. Organize the schools so they are geared for flexibility and change. These schools like other public schools and other social institutions could begin to exist for their own sake rather than to serve the needs of the society.

2. Provide flexibility in curriculum methodology.

3. Continuously upgrade the quality of the vocational technical educational program through coordination with employers and through improvements in teachers, facilities, and methods. High school dropouts, and other people low on the academic scale, but otherwise potentially useful members of the population, and conduct effective student recruiting programs within disadvantaged groups.

4. Specific technical courses for immediate earning power (6 mos. or less).

5. Careful curriculum revision and close contact with industry should insure the school's offering courses in areas where there are critical shortages of skilled workers at any given time.

6. Reduction in time required for vocational tech students.

7. Keeping vocational course material and training aids up to date to meet changing conditions.

8. Balanced program for all age groups. Emphasis should not be placed on one age group.

9. Providing training for persons just above the poverty guidelines.

10. Develop flexible programs. Possible need to allow flexibility as to time blocks, length of program, etc., to fit certain circumstances.

11. Special schools for certain skills.

12. Eligibility of certain areas of business should be considered. Many of these programs are vocational in nature but are excluded from participation in post secondary school.

13. Continued development of mobile school programs.

Analysis of Planning Capabilities

1. Assess current planning capability.

2. Strengthen planning capability, both staff and process, where necessary to permit effective planning.

3. Accumulate, adapt, or develop tested alternative models and materials which can be utilized in achieving objectives.

4. Work with specialist in setting up curriculum, program planning, and buying equipment.

5. Priorities as to the number and kind of new programs to be established should be determined.

6. Program development assistance from the state office should be extended.

7. Developing a plan for the administration of local programs.

8. Relate long-range planning in vocational education to long-range planning in the total education structure.

Cost of Vocational and Technical Education Programs

1. Determine on a continuing, compatible basis, by type of student and program, cost of program per student.

2. Identify public and private resources designated for vocational education, other resources which may be used for vocational education and the constraints within which the funds are to be used.

Evaluation of Vocational and Technical Education

1. Develop and implement an evaluation model which will assist in determining effectiveness of planning and programs and in indicating adjustments that should be made.

2. Yearly evaluation of vocational programs locally and state wide.

3. Continuous follow-up and re-examination of the effectiveness of the training given to ascertain that the optimum benefit to the students, to the industries and employers, and to the welfare of the state is being provided.

4. Evaluate instruction given to ascertain that to the greatest degree possible, the students are guided to be well balanced active contributors to society with encouragement in citizenship, humanities, healthful recreation, etc.

5. Planning for comprehensive and continuous evaluation of local and state vocational education programs including follow-up of vocational graduates and feed-back of follow-up data for use in curriculum revision and programs.

6. Designing an evaluative information system which will implement searching cost/utility analysis of the State Plan.

7. Continuous evaluation and upgrading of existing vocational and technical programs.

8. Methods of program evaluation.

9. Constant evaluation to introduce needed new programs and to eliminate "Mickey Mouse" or ineffective programs.

10. Set up state level follow-up programs for evaluation of vocational programs so as to improve programs.

11. Initiate studies to determine means of judging best use of available funds, personnel, and equipment.

12. A continuing program of having research teams evaluate programs in the vocational schools to point out weaknesses and strengths.

13. Develop a survey sheet to be completed by past graduates currently working in industry to demonstrate possible weaknesses in the educational program as actually applied to work assignments.

14. Evaluate and eliminate or update ineffective programs.

15. Evaluating existing vocational and technical programs in relation to existing needs.

16. Continued evaluation and improvement of instructional programs.

17. Initiate studies to set criteria for judging quality of course work being offered.

18. Study feasibility of setting up a constant quality measurement procedure at all schools involving use of qualified people from the state office and others.

19. Regular evaluation of all classroom instructors to make sure certain students are receiving adequate information to qualify themselves for their occupational objectives.

20. Developing a planning and evaluation system for the state.

21. Develop and describe the interrelationships between the socioeconomic plan and vocational education.

22. Evaluate trends in program offerings and the degree to which current vocational programs in the public schools and other sectors are meeting the employment training needs.

23. Synthesize the various elements of the program (e.g., curriculum, laboratory teacher education, guidance supervision, local programs of instruction) into a viable unitized effort.

Pre-vocational Training for Vocational and Technical Programs

1. Pre-vocational training.

2. Vo-tech clinics for high school students to show the skills in use.

3. Longitudinal studies of the results (in students and in career formation) of the new wave of occupational orientation courses at 7-8-9-grade levels.

4. Bring students with problems in learning into the vocational programs at least by 9th grade.

5. Expand industrial arts education program and offerings in the secondary schools.

6. Career development program at junior high level.

Opportunities for Vocational and Technical Training for All Students

1. To maintain "guidance for all" in its literal sense.

2. Improve accessibility to vo-tech education for all students.

3. Continue in efforts to make vo-tech education available to all Oklahoma students regardless of geographic or economical conditions.

4. Continue development of vocational-technical schools so that opportunities are available for all students within reasonable traveling distance.

5. Balanced program for all age groups. Emphasis should not be placed on one age group.

6. Expand vocational program to cover entire state.

7. Plan for location and availability of vocational-technical schools to include all areas of the state.

8. Problem: centered research with assistance to small school districts in this area.

9. Location of training site, according to the needs of the community, resources, etc.

10. Improve accessibility to vo-tech education for all students.

11. Continue in efforts to make vo-tech education available to all Oklahoma students regardless of geographic or economic conditions.

12. Continue development of vocational-technical schools so that opportunities are available for all students within reasonable traveling distance.

13. Establishment of regional schools in each region of Oklahoma so that students may work and commute to schools.

14. Determine actual needs for additional vo-tech schools in the area, so that maximum use can be made of present schools.

15. Development of more and larger schools in the Tulsa and Oklahoma City SMSA's.

16. Continued construction of rural area schools.

Involvement of Industry in Vocational and Technical Education

1. Closer liaison between vocational centers and industry.

2. Develop a visit exchange program between representatives of Oklahoma's employers and representatives of vocational-technical schools in order to develop a more current understanding of requirements for gainful employment.

3. Continuing contact with industry and business as an aid in keeping vo-tech education relevant.

4. Closer planning and relationships between trade and management areas and vo-tech programs.

5. The use of industrial educators in your vo-tech schools.

6. Get vo-tech representatives into all type of industry to accurately determine their needs in manpower development. Paying attention to details.

7. Continually follow-up in as many industries as possible to keep up on the "state of the art."

8. Develop program to receive information from employment agencies and business firms concerning skill shortages, and set up training facilities at vo-tech schools for skills which are not already available. Try to guide new students in these areas.

9. Follow-up with employers of graduates to determine areas where current training can be strengthened.

10. Establishing a program with industry whereby specific needs could be rapidly reflected in trained graduates.

11. Match job with program of education and provide clearinghouse for matching employee with employer.

Manpower Skill Survey

1. Community surveys through Chamber of Commerce organizations for both large and small cities, on their most common technical skill needs.

2. Questionnaires to government service administrators.

3. Inquiries to the principal industrial corporations as to their most pressing and common needs for skills.

4. Inquiry to personnel officers of both public and private employers as to their estimates of needs for skilled workers and semi-skilled workers.

5. Thoroughly check all calls as to number and kind of employees to both public and private technical training schools and centers.

6. Inquiry to hospitals, nursing homes, and convalescent centers as to their needs for skills.

7. City government skill need.

8. Work with professional groups, organizations, etc., which might represent cross sections of the business community, farmer-ranchers, industry, schools and training centers, municipalities, and labor unions as to their estimates of skill training needs.

9. Survey, inquiry, or coordination with representatives of the labor unions as to their estimate of skill training needs.

10. Survey Oklahoma industry to determine what the needs will be for vocational and technical trained employees in the future.

11. Gathering and analyzing a variety of data concerning future labor market needs in order to project the kinds of jobs that will be available over the next ten years.

12. Projection studies on manpower requirements by number and content nature and supply (OTIS is a good start).

13. Improve the ability to project future manpower needs in the state and tailor the programs offered to fill these needs. Assign a liaison man to maintain contact with employers and to conduct personal interviews to determine the number and nature of potential jobs for which graduates with appropriate training will be suitable.

14. Determine future needs of our society concerning vocational and technical education.

15. Current surveys of job opportunities and manpower in Oklahoma. These should be made available to all counselors throughout the state.

16. Work with needs of surrounding communities, industries, etc.

17. Don't underrate so-called menial jobs as shoe repair, electrical work, plumbing, etc.

18. Train by areas for jobs locally available.

19. Projecting with greater accuracy and more specific definition the manpower needs and the manpower desiderate in Oklahoma 1980-90.

20. Present and future employment needs as projected from local levels - as through area district surveys.

21. Building trades skills.

22. Work in close cooperation with industry. Find out their current and anticipated manpower needs.

23. Thorough research in a fifty-mile radius of vocational school as to available jobs which would require training at school.

24. Determine training skills needed for these job opportunities.

25. Direct development of training programs pointed directly at industry needs, i.e., electromechanical maintenance.

26. Provide for recurrent surveys of occupational needs, especailly for those occupations taught in vocational education.

27. Research regarding expected industry needs in terms of five-year and ten-year plans.

28. Determination of local, regional, and state needs from an employer's standpoint and potential student standpoint.

29. More emphasis on training professional repair men and women for household appliances.

30. Learn what business and industry is thinking in advance to prepare programs to meet needs as they develop.

31. An analysis of job opportunities in the state of Oklahoma for both girls and boys including projections of manpower and demographic trends.

32. Continue research in area to determine what attracts industry and develop such programs to bring more industrial development.

33. Project manpower needs.

34. Determine the types of job opportunities available for youth.

Financial Aid to Vocational and Technical Students

1. Establish a vo-tech scholarship fund for needy post secondary and adults.

2. Research the possible need to lower tuition at area schools for adult night courses. The tuition charged may be keeping some adults from trying to improve their skills or to learn a new vocational skill.

3. Develop a training cost account that can be used to motivate disadvantaged learners.

Advisory Committees

1. Developing the active participation of employers, civil service, and licensing agencies in the areas of initial program planning and planning for evaluation, curriculum development, job restructuring, career development, cooperative training, and retraining or upgrading.

2. Development of effective industry advisory committee.

3. Concentrate resources and energies on a realistic approach in helping industry solve their problems; that is, asking industry what and how they want a person trained.

4. Prospective employers should have a greater input into vocational education in terms of planning and expertise.

5. Develop an advisory committee from the target community to act as a review and grievance body.

6. Establish an advisory committee representative of Oklahoma industry and vocational-technical institutes.

7. Plan to bring citizens' committees closer to the actual courses and areas being taught.

8. Use leaders from industry in advisement capacities. Place them on special advisory boards and list their names in school literature.

9. Cooperation with local industry in establishing the proper curriculum with joint committees to determine the courses most suitable.

10. Organize industry advisory committees at state and local levels into a formal structure thru the state advisory council structures.

11. More emphasis on use of advisory council and committees.

12. Consideration of advisability of establishing local vocational-technical advisory councils as counterparts of state advisory council on vocational education to secure local interest and support of programs.

Vocational and Technical Training for New Industry

1. Provide as needed special instructors and specially designed courses, etc., to meet needs of new industries moving into the state.

2. Continue research in area to determine what attracts industry and develop such programs to bring more industrial development.

Professional Development of Vocational and Technical Education Personnel

1. Building programs to develop state leadership and programs of local staff development.

2. Develop training programs, workshops, and seminars for administrators and guidance counselors designed to teach methods of evaluating, interpreting, and relating current and long-range manpower needs to existing curricula and guidance offerings.

3. In-service programs for public school counselors to provide better understanding and utilization of vocational programs.

4. Study ways and means to bring guidance counselors to a better understanding of vocational-technical education.

5. Programs designed to help high school counselors improve their knowledge of the proper role of post secondary vo-tech education.

6. Developing wider acquaintance of educational laymen in regard to existing and developing vocational-technical programs, i.e., departmental workshops with broader representation, etc.

7. Production workshops for vo-tech teachers with section emphasis.

8. Teacher and staff education in writing and developing programmed instruction materials.

9. Select and hire personnel that can relate to the particular segment of the population to be served.

10. Developing a vocational education professional personnel development program for the state.

11. To develop viable relationships with a wide array of professional personnel concerned with manpower problems.

12. Better vocational-technical opportunity orientation of elementary and secondary classroom teacher and guidance counselors.

Related Curriculum to Vocational and Technical Education Programs

1. Opportunities should be made available and students encouraged to participate in self-development courses such as communications (oral and written).

2. Students should receive an education in areas other than their vocation that will be of benefit to them in their vocation. Such as math, English, etc.

3. Stress basic education along with technical training.

4. Establish a two-year "core" curriculum of fundamental engineering or scientific technician courses which would provide the basic math-science background for nearly any type of engineering or scientific technician in the petroleum industry. Make this curriculum available in State Vocational and Technical Education Institutes.

5. Curriculum guidelines by which vocational-technical education and academic education would reinforce each other and emphasize fundamental skills and fundamental ways of approaching problems.

6. Fundamentals of private ownership and free enterprise.

7. Teaching relating to basic responsibilities.

8. Give greater emphasis to the communication skills, especially as related to youth and disadvantaged.

9. Make all course offerings realistic. Weed out those courses that have no place in the world of work.

10. Development of core curricula for related programs and occupations.

11. Opportunities (programs, material, methods, etc.) for personal, social, and cultural education during vocational education programs.

12. Development of vocational materials that are functionally integrated with basic education.

13. Personal and family finance education.

14. A more complete study of the free enterprise system.

15. Basic management techniques should be incorporated into all courses where it is feasible.

16. Management rights should be discussed.

17. Good basic math.

18. Good basic English.

19. Basic principles of economics.

20. Define a balance vocational education program in terms of curriculum, staff, students, facilities, equipment, and individual and labor market needs.

Adult Education

1. Greater emphasis on adult education.

2. Strengthen the night or adult education program to assist those who are employed full time to upgrade their abilities for improving their economic status.

3. Establish a vo-tech scholarship fund for needy post secondary and adults.

4. More adult programs--night classes.

5. Continuance of basic adult education programs--with vocational education introductions.

6. More adequate financing for adult education programs.

7. Help establish better community surveys to determine potential of adult education needs.

8. Research the possible need of lower tuition at area schools for adult night courses. The tuition charge may be keeping some adults from trying to improve their skills or to learn a new vocational skill.

Short-term Training Programs Related to Business and Industry for Upgrading Employees

1. Working arrangements with manufacturing and services entities to develop and carry out short term teaching of new techniques or refreshers in existing techniques for their employees.

2. In-service training sessions conducted by other persons or groups providing the same type of service.

3. Provide refresher courses for graduates.

4. Mobile classroom training units for short-term training programs requested by business and industry.

5. Continuing education for updating and upgrading where needed in business, industry, and services.

6. Self-improvement training for those already employed during off duty hours.

7. Provision for training and upgrading of municipal employees.

8. Specialized training for areas such as firemen and policemen which seem to often be overlooked.

9. Provide for opportunities for "short-term" education programs for people already employed.

Innovation in Teaching Methods

1. Develop innovative ways of teaching and helping the learner in various training programs.

2. Individualized teaching methods; that is, each topic is taught within the limit of each individual according to his needs.

3. Programmed materials to better meet needs of each individual student with funds provided for these materials.

4. Teacher and staff education in use of programmed instruction material.

5. Better teaching aids and equipment for all vocational programs.

6. Developing, testing, and experimenting with new and approved instructional systems. It is assumed that these instructional systems would be based on analysis, should be individualized, self-paced, and probably would utilize both multi-media.

7. Planning and establishing continuing provision for the diffusion and wide-scale adoption of new and approved instructional systems.

8. Individualized teaching methods; that is, each topic is taught within the limit of each individual according to his needs.

9. Improve curriculum and instruction.

10. Develop a library of teaching curriculum, plans, and aids for vocational teachers.

Vocational and Technical Training on a Regional Basis

1. Centered research with assistance to small school districts in this area.
2. Establishment of regional schools in each region of Oklahoma so that students may work and commute to school.
3. Consideration of needs within each regional area to determine if existing schools and/or facilities could be used for state programs.
4. Train by areas for jobs locally available.
5. Defining vocational and technical training requirements on a regional basis within the state.

State-wide Coordination of all Vocational and Technical Program Offerings

1. Coordinate the state-wide effort in vocational and technical training so that the right courses are offered in the right places for the maximum student load.
2. Designing career ladders and developing articulated curriculum from the secondary level through the post secondary level to the adult education level in each occupational cluster.
3. Curriculum coordination, cooperative equipment utilization, shared physical plant utilization between area vocational-technical schools and junior colleges.
4. Methods and techniques of increasing communication and cooperation between education and business and industry.
5. Articulation between high schools and community colleges in vo-tech programs.
6. Coordination of occupational programs on regional or state basis.
7. Studies designed to improve the articulation of high school level and post secondary level vo-tech educational programs.
8. Continue to work closely with all educators. We must not fall into the traps of the academics vs vocational. Education covers both.
9. Establish connection between high school vo-ed and college level work in junior colleges or community colleges to develop approach to subprofessional training.
10. Utilize same occupational education advisory committee for secondary, post secondary schools rehabilitation programs for correctional institutions, mentally retarded, etc., in each delineated socioeconomic geographic area.
11. Coordinate curricula of high schools and junior colleges with those of vo-tech schools to avoid duplications.

12. The relative role of area vocational schools and post high school institutions offering vocational-technical education should be clarified.

13. Defining vocational and technical training requirements on a regional basis within the state.

14. Elimination of duplication of effort which is excessive in cost and time.

15. Lets coordinate vo-tech efforts at all levels. Some duplication may be good but it needs to be controlled.

16. Coordination between vocational school curricula and secondary school curricula.

17. Improving the articulation of vocational education at all levels.

18. Developing policy for occupational education at the state level.

Train for Cluster Occupations

1. Grouping all occupations into workable "clusters," so that "core" type curricula can be developed for each cluster of occupations.

Disadvantaged

1. Create a consideration of the utilization of the disadvantaged both in and out of public schools in all phases of vocational education.

2. Develop positive staff attitudes about the poor and disadvantaged.

3. Implement training centers within disadvantaged communities.

4. Research by experimenting with different methods to determine the training impact on poor and disadvantaged.

5. Develop a vocational program in relation to a home improvement program in the poor community.

6. Prospective training for students in the lower ranges in abilities. The slow learner needs vocational training.

7. Provide an adequate number of properly trained vocational guidance counselors at lower grade levels and high school level so the student (and parents) can have competent career guidance.

8. Improved method of presenting learning materials to disadvantaged trainees.

9. Meeting group needs for transportation in urban areas.

10. Develop a training cost account that can be used to motivate disadvantaged learners.

11. Develop programs to involve more of the lower socioeconomic ethnic groups.

12. Training especially developed to suit the needs of disadvantaged.

13. A study of factors affecting upward mobility of Indian women and girls.

14. Become more concerned about students with low academic achievement.

15. Programs for the handicapped.

16. Utilize same occupational education advisory committees for secondary, post secondary schools rehabilitation programs for correctional institutions mentally retarded, etc., in each delineated socioeconomic geographic area.

Transportation of Students to and from Vo-tech Schools

1. Continue development of vocational-technical schools so that opportunities are available for all students within reasonable traveling distance.

2. Establishing regional schools in each region of Oklahoma so that students may work and commute to schools.

3. Meeting group needs for transportation in urban areas.

Contract Training with Private Schools and Industry

1. Evaluated testing of performance contracting (with accountability and profit rewards) with industry to do occupational education.

2. Utilize private trade schools on performance contract basis for developing new programs.

Coordination of Vocational and Technical Program Offerings with Governmental Agencies

1. Coordination between related government agencies. Administered through state rather than regional.

2. Combine with other agencies to keep current on future economic developments in the state and localities.

3. Establish cooperative arrangements among state agencies, such as OESC, OSU, etc., to combine agency capabilities for total program.

4. Research regarding other states problems encountered with vo-tech programs and their possible solutions.

5. Close coordination with local community action program and other state, federal, and local programs.

6. Consider patterning technical education system along lines developed by the South Carolina Technical Education Commission.

7. Cooperate with public and private manpower agencies', e.g., industrial developme nt agencies, chamber of commerce, and Employment Security Commission in coordinate planning.

8. More direct contact with business and industry. Thus, move some functions of the Employment Securities Commission to vo-tech.

9. To develop and maintain viable relationships with employment service counselors (placement necessitates this idea).

Acceptance of Vocational and Technical Education by Academically Oriented Administrators

1. Better public relations with other educators.

2. Study ways to sell the need and place for vo-tech training to academically oriented secondary school administrators.

3. Restudy the place of some vo-tech training to academically oriented secondary school administrators.

Teachers of Vocational and Technical Education Programs

1. Vocational education teachers.

2. Salary structures should be established which will permit the hiring of instructor personnel not only technically qualified, but trained in vocational-technical education.

3. Train teachers to work with students who have a record of misbehavior.

4. Greater emphasis on vocational teacher training.

5. Support and plan for increasing educational qualifications for faculty.

6. Teacher training and upgrading.

7. Provide quality instructors for teaching positions.

8. Recruiting and training of qualified and capable vocational instructors.

9. Continued evaluation and improvement of instructors.

10. Take a critical look at teacher preparation and certification.

11. Ladder type certification at varying skills levels.

12. Initiative studies to set criteria for judging quality of course work being offered (with initial emphasis on instructor qualifications).

13. Frequent evaluation of instructors effectiveness and progress of their own continuing education.

14. Retraining of teachers on their jobs.

15. Teacher training programs:
    (a) recruiting
    (b) training
    (c) in-service training
    (d) closer look at certification and recertification
    (e) teacher workshops and institutes
    (f) unified teacher training program (core curriculum)

16. Twelve month program for (11 month student program).

17. Realistic certification requirements for vocational-technical teachers in area vocational schools should be established (this may involve major modification of existing standards.)

18. The ability to staff adequately vocational and technical schools.

19. Teacher training and salary structure.

20. To infuse a clear emphasis on vocational and technical aspects of guidance in the counselor education curricula and in-service programs for counselors operating without these concepts and awarenesses.

21. Short training courses for high school counselors as to the value and possibilities of vo-tech education.

22. Develop programs which will aid vocational teachers to better train their students.

23. Develop programs to better train vocational teachers at the college level.

24. Coordination between vocational school curriculum and secondary school curricula. Standards for teachers should be considered.

Health Education

1. Continuing education for licensed practical nurses.

2. Makes courses worthwhile with in-depth training.

3. Expanded health occupation services programs and facilities, designed to meet growing demands.

4. Medically related technologies should receive greater emphasis.

5. Make study of needs for medical and social services.

6. Identification of opportunities in health related occupations, with emphasis on training possibilities for school-supported careers; such as special education aides, visual and speech aids, auditory testing personnel, and homemaker aids for Indian schools.

Funding for Vocational and Technical Programs

1. Investigation of allotment of funds to respective vocational organizations.

2. Determining new and imaginative ways to finance vocational and technical education for the state.

3. Finance programs on an equitable basis, i.e., tax basis, rather than subsidization by employers.

4. Investigate duplication of services so that maximum use of financing is possible.

5. Stay alert in the political areas to insure adequate funding at all levels of government.

6. If possible, the funding level from vocational-technical funds should be projected further in advance.

7. Investigate ways for better financing of programs.

8. Develop financial support for the program and the individual students from industry and other elements of our society by soliciting grants and scholarships to provide trained individuals for the jobs these contributors want filled.

CHAPTER III

CORRESPONDENCE SHEETS NO. 2 AND 3 RESPONSES AND ANALYSIS

A letter and Correspondence Sheet No. 2 (Appendix B) were sent to all the participants who returned Correspondence Sheet No. 1. The participants' ranked responses were computed and the results are presented in Table I.

Since each factor was ranked on an 11-point countinuum, ranging from most important (1) to least important (11), those factors with the lowest group averages are considered as most important and appear first in the ranked order.

TABLE I

THE RESULT FROM CORRESPONDENCE SHEET NO. 2

	Factors	Total Average
1.	Select students for vocational and technical education	4.647
2.	Guidance and counseling	2.34
3.	Placement of vocational and technical trainees	2.921
4.	Analyze current vocational offerings in relationship to employment opportunities	2.274
5.	Follow-up of students	3.586
6.	Cooperative vocational and technical training	4.104
7.	Public relations and publicity	4.509
8.	Youth organizations (VICA, FFA, FHA, etc.)	6.274
9.	Post-secondary vocational education and/or technical education	3.834
10.	Explore new fields for vocational and technical training	3.627
11.	Facilities and equipment for vocational and technical programs	3.333

	Factors	Total Average
12.	Recruit students for vocational and technical programs	4.922
13.	Orientation to employment	2.941
14.	Performance standards for vocational and technical training programs	2.921
15.	Information system for vocational and technical program planning	4.294
16.	Establish goals and measurable objectives	2.960
17.	Dropouts	5.00
18.	On-the-job training	4.137
19.	Unemployed and underemployed individuals	4.040
20.	Flexibility of vocational and technical programs	3.674
21.	Analysis of planning capabilities	6.420
22.	Cost of vocational and technical education programs	4.333
23.	Evaluation of vocational and technical education	3.019
24.	Pre-vocational training for vocational and technical programs	4.647
25.	Opportunities for vocational and technical training for all students	3.862
26.	Involvement of industry in vocational and technical education	2.480
27.	Manpower skills surveys	4.431
28.	Financial aid to vocational and technical students	4.784
29.	Advisory Committees	5.215
30.	Vocational and technical training for new industry	3.745
31.	Professional development of vocational and technical education personnel	3.510
32.	Related curriculum to vocational and technical education programs	3.863

	Factors	Total Average
33.	Adult education	3.961
34.	Short-term training programs related to business and industry for upgrading employees	4.060
35.	Innovations in teaching techniques	3.784
36.	Vocational and technical training on a regional basis	5.540
37.	State-wide coordination of all vocational and technical program offerings	3.706
38.	Train for cluster occupations	4.596
39.	Disadvantaged persons and programs	4.059
40.	Transportation of students to and from vocational and technical schools	6.784
41.	Contract training with private schools and industry	5.922
42.	Coordination of vocational and technical program offerings with governmental agencies	4.725
43.	Acceptance of vocational and technical education by academically oriented administrators	3.627
44.	Teachers of vocational and technical education programs	2.820
45.	Health occupations	4.163
46.	Funding for vocational and technical programs	2.820

The participants were mailed a letter and Correspondence Sheet No. 3, (Appendix C) and were asked to examine the ranked factors compiled from the responses obtained from Correspondence Sheet No. 2. If the participants felt that a factor should be placed significantly higher or lower, they were to indicate which factor, its ranking and justification as to why the factor should be placed higher or lower in the list of priorities.

Two analyses were made of the Delphi responses. The two ways of viewing the results are shown in Table II.

Group One is a comparison of national, state, and local participants ranking of factors. The asterisk represents the factors ranked in the upper quartile or the top twelve factors. There existed some differences between the groups as to the importance of factors to be considered in the planning process.

TABLE II

GROUPED RANKING OF FACTORS

		GROUPING ONE			GROUPING TWO				TOTAL[1] AVE.
		National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
1.	Analyze current vocational offerings in relationship to employment opportunities	*1.6	*2.33	*2.61	*2.31	*1.92	*2.57	*2.14	*2.274
2.	Guidance and counseling	*2.6	*2.2	*2.35	*2.87	*1.85	*1.86	*3.86	*2.34
3.	Involvement of industry in vocational and technical education	*1.6	*2.21	*3.13	*2.43	*2.83	*2.14	*2.00	*2.480
4.	Teachers of vocational and technical education programs	3.55	*2.80	*2.7	*2.91	*3.00	*3.29	*2.57	*2.820
5.	Funding for vocational and technical programs	4.0	*3.07	*2.43	*2.96	*2.58	3.57	*2.57	*2.820
6.	Placement of vocational and technical trainees	*2.1	*3.27	*3.26	*2.43	3.46	3.43	4.57	*2.921
7.	Performance standards for vocational and technical training programs	*2.3	*3.4	*3.13	*3.43	*2.69	*2.43	3.86	*2.921
8.	Orientation to employment	3.6	*3.27	*2.7	*3.26	3.39	*2.86	3.71	*2.941

TABLE II (Continued)

GROUPED RANKING OF FACTORS

		GROUPING ONE			GROUPING TWO				TOTAL AVE.
		National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
9.	Establish goals and measurable objectives	*3.3	*3.00	*2.96	*3.30	*2.154	*3.000	*3.000	*2.960
10.	Evaluation of vocational and technical education	*2.0	*3.0	3.74	*3.13	*3.15	*2.86	*3.14	*3.019
11.	Facilities and equipment for vocational and technical programs	4.6	*3.53	*2.7	3.96	*3.23	*2.29	4.00	*3.333
12.	Professional development of vocational and technical education personnel	4.1	4.06	*3.13	4.17	3.38	*3.29	*3.29	*3.510
13.	Follow-up of students	*2.4	3.67	4.07	*3.17	4.15	3.71	3.71	3.586
14.	Explore new fields for vocational and technical training	3.9	4.07	3.48	3.74	3.69	*3.29	4.00	3.627
15.	Acceptance of vocational and technical education by academically oriented administrators	4.0	3.6	3.7	*3.48	3.77	6.14	*2.86	3.627

TABLE II (Continued)

GROUPED RANKING OF FACTORS

		GROUPING ONE			GROUPING TWO				TOTAL AVE.
		National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
16.	Flexibility of vocational and technical programs	3.6	4.3	3.43	3.65	*2.15	3.86	4.00	3.674
17.	State-wide coordination of all vocational and technical program offerings	3.8	4.0	3.56	4.61	*2.46	4.43	4.29	3.706
18.	Vocational and technical training for new industry	3.9	4.73	*3.17	4.22	3.38	*2.71	5.29	3.745
19.	Innovations in teaching techniques	4.4	4.13	3.61	4.30	4.17	*2.57	*3.43	3.784
20.	Post-secondary vocational education and/or technical education	*2.9	*3.4	4.74	*3.48	3.77	4.57	5.00	3.834
21.	Opportunities for vocational and technical training for all students	3.6	3.73	4.39	4.13	3.85	4.43	3.57	3.862
22.	Related curriculum to vocational and technical education programs	4.9	3.87	3.69	4.39	4.17	4.00	*3.43	3.863

TABLE II (Continued)

GROUPED RANKING OF FACTORS

		GROUPING ONE			GROUPING TWO				TOTAL AVE.
		National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
23.	Adult education	4.5	4.2	3.56	4.22	4.31	3.86	3.86	3.861
24.	Unemployed and underemployed individuals	3.9	4.6	4.09	4.78	4.23	3.86	5.14	4.040
25.	Disadvantaged persons and programs	*3.5	4.87	4.13	4.39	4.54	4.14	3.86	4.059
26.	Short-term training programs related to business and industry for upgrading employees	4.77	4.53	3.52	4.17	4.08	*2.86	3.86	4.060
27.	On-the-job training	4.4	4.73	3.57	4.52	4.54	3.71	*3.29	4.137
28.	Cooperative vocational and technical training	*3.3	4.43	4.43	4.00	4.17	5.57	5.00	4.104
29.	Health occupations	5.75	4.00	4.04	4.78	3.92	4.00	*3.43	4.163
30.	Information system for vocational and technical program planning	*2.3	5.0	5.0	4.74	4.23	4.71	5.29	4.294

TABLE II (Continued)

GROUPED RANKING OF FACTORS

		GROUPING ONE			GROUPING TWO				TOTAL AVE.
		National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
31.	Cost of vocational and technical education programs	4.0	4.89	4.22	4.61	4.23	3.71	4.71	4.333
32.	Manpower skills survey	4.1	5.00	4.65	4.74	3.77	4.86	5.57	4.431
33.	Public relations and publicity	4.4	4.4	4.22	4.26	4.85	5.15	*3.43	4.509
34.	Train for cluster occupations	4.0	5.08	5.00	4.78	3.72	6.14	4.00	4.596
35.	Pre-vocational training for vocational and technical programs	3.6	4.93	5.35	4.78	*3.08	5.86	5.71	4.647
36.	Select students for vocational and technical education	4.1	5.33	4.48	4.09	5.39	5.14	6.86	4.647
37.	Coordination of vocational and technical program offerings with governmental agencies	4.5	4.06	5.39	4.61	4.62	6.14	4.43	4.725

TABLE II (continued)

GROUPED RANKING OF FACTORS

		GROUPING ONE			GROUPING TWO				TOTAL AVE.
		National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
38.	Financial aid to vocational and technical students	5.0	5.26	4.7	5.26	5.08	4.57	4.00	4.784
39.	Recruit students for vocational and technical programs	4.2	5.73	4.87	5.04	4.85	5.43	4.57	4.922
40.	Dropouts	5.1	4.53	5.52	4.83	6.00	5.00	5.57	5.00
41.	Advisory Committees	5.7	5.2	5.21	5.39	4.69	5.14	6.00	5.215
42.	Vocational and technical training on a regional basis	5.2	6.71	5.21	6.23	4.54	6.14	4.14	5.540
43.	Contract training with private schools and industry	5.2	7.6	5.17	5.83	6.39	5.14	5.71	5.922
44.	Youth organizations (VICA, FFA, FHA, etc.)	6.8	6.13	5.87	6.13	6.92	6.00	5.86	6.274
45.	Analysis of planning capabilities	4.6	5.86	7.96	5.35	5.00	6.71	5.71	6.420

TABLE II (continued)

GROUPED RANKING OF FACTORS

	GROUPING ONE			GROUPING TWO				TOTAL AVE.
	National N=12	State N=15	Local N=24	Education N=24	Industry N=13	Business N=7	S & L Government N=7	N=54
46. Transportation of students to and from vocational and technical schools	6.9	7.27	6.87	6.74	6.39	9.14	6.71	6.784

*Indicates the top 12 ranks in each group classification.

[1]Because three questionnaires were returned without any group classification, the N's of the two groupings do not total up to the sum of 52. This total column is the same total average for both, Grouping One and Grouping Two.

Group Two represents a breakdown of participants from education, industry, business, and state and local government. Here, again, there existed a difference in the ranking of factors between the group classifications.

The total average column represents the ranking of the factors from most important to least important, and is the final ranking of all participants' responses. There were not enough consensus among the participants on specific questions after the mailing out of Correspondence Sheet No. 3 to raise or lower the ranking. However, each of the participants' responses have been considered as an input in the study.

Chapter IV

CONCLUSIONS

The Delphi Technique has created an awareness of factors or areas to be analyzed and considered in planning vocational and technical education in Oklahoma for the 70's. The State Department of Vocational and Technical Education is making a directional plan for this decade. Upon completion and acceptance of the plan, strategies will be developed for each year for implementing the directional plan.

The Delphi results should be used as an input in the planning process and not as the plan itself. Interpretation of the participants' responses and the meaning of the importance of the factors in planning is difficult; i.e., is a factor that ranked in the last quartile of no importance to consider, or does it mean that those factors are important but are items that do not warrant change and should be continued.

The Delphi Technique appears to be a method for planners of vocational and technical education to use in assisting them in the planning process. Much insight was gained from the participants' input and the analysis of data received. Using the Delphi process allows planners to get the views in a broad perspective rather than from an isolated point of view.

The factor contained in this report will be used to guide the development of a future publication, A Plan of Action for the 70's for the Oklahoma State Department of Vocational and Technical Education.

Appendix A

Votech
OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

In order to provide Oklahoma's citizens and industries with the best vocational and technical education obtainable, the State Department of Vocational and Technical Education is conducting a study to determine its role in the 1970's. Our Division of Research, Planning, and Evaluation is currently conducting research in this area. As a foundation for this research, we need the ideas and knowledge of leading educators, industrialists, and laymen.

It is for this reason that I am asking your assistance in helping the State Department of Vocational and Technical Education to obtain basic individual ideas about the role vocational and technical education should take in meeting the training needs of Oklahoma's citizens and industries in the 1970's.

Thank you for your time and efforts, which I can assure you will be wisely used.

Sincerely,

Francis Tuttle, State Director
Vocational and Technical Education

Enclosures

DJ/YH-02/10

VoTech
OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

The Oklahoma State Department of Vocational and Technical Education is currently in the process of planning vocational and technical education for the seventies. In an attempt to insure that all inputs to effective vocational and technical program planning are incorporated into this effort, several persons are being asked to assist us in the selection of factors to be analyzed.

The Delphi Technique has been chosen as the method to be used in obtaining the factors to examine for possible use in our planning process. This technique, which is built on the strength of informed intuitive judgment, is intended to get opinions from persons without bringing the individuals together in any kind of a face-to-face confrontation. Successive questionnaires and feedback are necessary with each round designed to produce more carefully considered group opinions. Three separate mailings will be used by the State Department of Vocational and Technical Education to gather and finalize your opinions.

Correspondence No. 1 (Attached)	List ten factors or areas upon which the State Department of Vocational and Technical Education should concentrate its resources and energies in order to plan vocational and technical education during the decade.
Correspondence No. 2	A list of factors will be compiled from the participants' responses and mailed back to you. Using this list each person will be asked to evaluate and rank each item by such criteria as importance, feasibility, probability of success, etc.

Correspondence
No. 3

A list of priority factors will be compiled from the concensus obtained in Step 2. Each participant will be asked to either revise their opinions in line with the priority list developed in Step 2 or specify their reasons for remaining outside the concensus.

From the response obtained in Step 3, a final list of priority factors will be incorporated into the total planning process for Oklahoma's Vocational and Technical Education Program.

We hope you will agree to participate with us in this effort to provide a well-rounded education to all of Oklahoma's citizens. Thank you very much for your assistance.

Sincerely,

Charles O. Hopkins, Planner
Division of Research, Planning,
and Evaluation

COH/YH-03/10

58/59/60

CORRESPONDENCE SHEET NO. 1

(TO BE ENCLOSED IN RETURN MAIL)

Please list up to ten possible endings, no particular order of importance required, to the following statement:

In order to plan vocational and technical education during the decade ahead, the State Department of Vocational and Technical Education should concentrate its resources and engeries in the following area.....

EXAMPLE: A possible answer to the above statement might be, "Student follow-up of vocational program graduates."

LIST YOUR ANSWERS BELOW

NUMBER ONE:

NUMBER TWO:

NUMBER THREE:

NUMBER FOUR:

NUMBER FIVE:

NUMBER SIX:

NUMBER SEVEN:

NUMBER EIGHT:

Appendix B

Votech
OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

Thank you for completing the first of three correspondence questionnaires that the Oklahoma State Department of Vocational and Technical Education is analyzing to determine its role in the 1970's. The results of Correspondence Sheet No. 1 are promising. We hope you will continue to render your assistance by completing Correspondence Sheet No. 2.

Correspondence Sheet No. 2 contains the major factors that were identified from the suggestions you and others recommend to the State Department of Vocational and Technical Education for planning Oklahoma's future vocational and technical education program. In order that we can determine the most important factors, we are asking you to rank them on an 11-point continuum.

The highest ranked factors chosen by you and others will be investigated and analyzed to the extent of our capabilities by using the specific suggestions given us in Correspondence Sheet No. 1. Not all the factors contained in Correspondence Sheet No. 2 can be examined due to resources, time, and cost. Therefore, consider carefully those factors that you feel have a reasonable chance of being analyzed.

Again, let me thank you for giving us your time and attention which I know are important to you. A quick response on Correspondence Sheet No. 2 will be very much appreciated.

Sincerely,

Charles O. Hopkins, Planner
Division of Research, Planning,
and Evaluation

Enclosures

COH/YH-07/10

CORRESPONDENCE SHEET NO. 2

(TO BE ENCLOSED IN RETURN MAIL)

Below are the combined factors that you and others suggested that we utilize in planning Oklahoma's vocational and technical role during the 70's. In order that a priority can be determined on most essential factors to be analyzed, we are asking you to rank each factor on an 11-point continuum, ranging from most important (1) to least important (11).

Please be selective in choosing those factors you consider as most important for our analysis.

EXAMPLE:	Place (X) in appropriate section Most Important ... Least Important
1. Use student follow-ups to evaluate teachers.	/ / X / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11
2. Make vo-tech workshops more productive.	/ / / / / / X / / / / / / 1 2 3 4 5 6 7 8 9 10 11
1. Select students for vocational and technical education	/ / / / / / / / / / / /
2. Guidance and counseling	/ / / / / / / / / / / /
3. Placement of vocational and technical trainees	/ / / / / / / / / / / /
4. Analyze current vocational offerings in relationship to employment opportunities	/ / / / / / / / / / / /
5. Follow-up of students	/ / / / / / / / / / / /
6. Cooperative vocational and technical training	/ / / / / / / / / / / /
7. Public relations and publicity	/ / / / / / / / / / / /

8.	Youth Organizations (VICA, FFA, FHA, etc.)	/ / / / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11
9.	Post-secondary vocational education and/or technical education	/ / / / / / / / / / / / /
10.	Explore new fields for vocational and technical training	/ / / / / / / / / / / / /
11.	Facilities and equipment for vocational and technical programs	/ / / / / / / / / / / / /
12.	Recruit students for vocational and technical programs	/ / / / / / / / / / / / /
13.	Orientation to employment	/ / / / / / / / / / / / /
14.	Performance standards for vocational and technical training programs	/ / / / / / / / / / / / /
15.	Information system for vocational and technical program planning	/ / / / / / / / / / / / /
16.	Establish goals and measurable objectives	/ / / / / / / / / / / / /
17.	Dropouts	/ / / / / / / / / / / / /
18.	On-the-job training	/ / / / / / / / / / / / /
19.	Unemployed and underemployed individuals	/ / / / / / / / / / / / /
20.	Flexibility of vocational and technical programs	/ / / / / / / / / / / / /
21.	Analysis of planning capabilities	/ / / / / / / / / / / / /
22.	Cost of vocational and technical education programs	/ / / / / / / / / / / / /
23.	Evaluation of vocational and technical education	/ / / / / / / / / / / / /
24.	Pre-vocational training for vocational and technical programs	/ / / / / / / / / / / / /
25.	Opportunities for vocational and technical training for all students	/ / / / / / / / / / / / /
26.	Involvement of industry in vocational and technical education	/ / / / / / / / / / / / /

27.	Manpower skills surveys	/ / / / / / / / / / / / / 1 2 3 4 5 6 7 8 9 10 11
28.	Financial aid to vocational and technical students	/ / / / / / / / / / / /
29.	Advisory Committees	/ / / / / / / / / / / /
30.	Vocational and technical training for new industry	/ / / / / / / / / / / /
31.	Professional development of vocational and technical education personnel	/ / / / / / / / / / / /
32.	Related curriculum to vocational and technical education programs	/ / / / / / / / / / / /
33.	Adult education	/ / / / / / / / / / / /
34.	Short-term training programs related to business and industry for upgrading employees	/ / / / / / / / / / / /
35.	Innovations in teaching techniques	/ / / / / / / / / / / /
36.	Vocational and technical training on a regional basis	/ / / / / / / / / / / /
37.	State-wide coordination of all vocational and technical program offerings	/ / / / / / / / / / / /
38.	Train for cluster occupations	/ / / / / / / / / / / /
39.	Diadvantaged persons and programs	/ / / / / / / / / / / /
40.	Transportation of students to and from vocational and technical schools	/ / / / / / / / / / / /
41.	Contract training with private schools and industry	/ / / / / / / / / / / /
42.	Coordination of vocational and technical program offerings with governmental agencies	/ / / / / / / / / / / /
43.	Acceptance of vocational and technical education by academically oriented administrators	/ / / / / / / / / / / /
44.	Teachers of vocational and technical education programs	/ / / / / / / / / / / /

45. Health occupations

46. Funding for vocational and technical programs

/ / / / / / / / / / / / /
1 2 3 4 5 6 7 8 9 10 11

/ / / / / / / / / / / /

If we have somehow missed a factor that you consider important, please write below the factor, its ranking, and your reasons for considering the factor:

1. / / / / / / / / / / / /

REASON:

2. / / / / / / / / / / / /

REASON:

REASON:

COMMENTS:

Appendix C

70/71

Votech
OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

The Delphi Technique has been very successful, and your cooperation has been instrumental in this success. A ranking of factors is presented as the last step to complete your participation in the Technique. If it is possible, we would like to have your comments by January 31.

On behalf of the State Department of Vocational and Technical Education, I would like to express our gratitude to you for assisting us in the selection of factors to analyze in planning the role of vocational and technical education in Oklahoma for the 70's. In addition, I personally would like to extend my appreciation for the enthusiasm and interest you have shown in the project.

Upon completion of the study, I will send you a copy of our report. If, at any time, I can be of assistance to you, please do not hesitate to call on me.

Sincerely,

Charles O. Hopkins, Planner
Division of Research, Planning,
and Evaluation

Enclosure

COH/YH-13/10

72/73

CORRESPONDENCE SHEET NO. 3

(TO BE ENCLOSED IN RETURN MAIL)

Below are the factors you and others ranked in respect to their "importance" for planning Oklahoma's vocational and technical education role during the 70's. Since each factor was ranked on an 11-point continuum ranging from most important (1) to least important (11). Those factors with the lowest group averages are considered as most important and appear first in the ranked order.

Examine these ranked factors and, if you feel that they should be placed significantly higher or lower, use the space provided at the end of Corresponence Sheet No. 3 to indicate which factors and your justification as to why they should be placed higher or lower on our list of priorities.

RANK NO.	FACTOR	GROUP AVERAGE
1.	Analyze current vocational offerings in relationship to employment opportunities	2.274
2.	Guidance and counseling	2.340
3.	Involvement of industry in vocational and technical education	2.480
4.	Teachers of vocational and technical education programs	2.820
5.	Funding for vocational and technical programs	2.821
6.	Cooperative vocational and technical training	2.921
7.	Performance standards for vocational and technical training programs	2.922
8.	Orientation to employment	2.941
9.	Establish goals and measurable objectives	2.960

10.	Evaluation of vocational and technical education	3.019
11.	Facilities and equipment for vocational and technical education	3.333
12.	Professional development of vocational and technical education personnel	3.510
13.	Follow-up of students	3.568
14.	Explore new fields for vocational and technical training	3.627
15.	Acceptance of vocational and technical education by academically oriented administrators	3.628
16.	Flexibility of vocational and technical programs	3.647
17.	State-wide coordination of all vocational and technical program offerings	3.706
18.	Vocational and technical training for new industry	3.745
19.	Innovations in teaching techniques	3.784
20.	Post-secondary vocational education and/or technical education	3.843
21.	Opportunities for vocational and technical training for all students	3.862
22.	Related curriculum to vocational and technical education personnel	3.863
23.	Adult education	3.961
24.	Unemployed and underemployed individuals	4.040
25.	Disadvantaged persons and programs	4.059
26.	Short-term training programs related to business and industry for upgrading employees	4.060
27.	On-the-job training	4.137
28.	Cooperative vocational and technical training	4.140
29.	Health occupations	4.163
30.	Information system for vocational and technical program planning	4.294
31.	Cost of vocational and technical education programs	4.333

32.	Manpower skills surveys	4.431
33.	Public relations and publicity	4.509
34.	Train for cluster occupations	4.596
35.	Pre-vocational training for vocational and technical programs	4.647
36.	Select students for vocational and technical education	4.648
37.	Coordination of vocational and technical program offerings with governmental agencies	4.725
38.	Financial aid to vocational and technical students	4.784
39.	Recruit students for vocational and technical programs	4.922
40.	Dropouts	5.000
41.	Advisory Committees	5.215
42.	Vocational and technical training on a regional basis	5.540
43.	Contract training with private schools and industry	5.922
44.	Youth organizations (VICA, FFA, FHA, etc.)	6.274
45.	Analysis of planning capabilities	6.420
46.	Transportation of students to and from vocational and technical schools	6.784

Write the rank number and the justification as to why you feel this factor should receive a lower or higher ranking. (Use back of pages for extra space.)

RANK NO. _____
REASON FOR RANKING CHANGE:

RANK NO. _____
REASON FOR RANKING CHANGE:

APPENDIX D

DELPHI PARTICIPANTS

National Level

J. M. Anderson
Director of Development
Phillips Petroleum Company
Bartlesville, Oklahoma

Harry Birdwell
National President
Future Farmers of America
Stillwater, Oklahoma

Samuel M. Burt
Business Council for International
Understanding Program
American University
Washington, D.C.

Dr. Joe Champagne
Center for Human Resources
University of Houston
Houston, Texas

Dr. John K. Coster, Director
Center for Occupational Education
North Carolina University
Raleigh, North Carolina

Dr. Joe Epstein, Chief
Economic Development & Manpower
Research & Resources Group
U.S. Department of Labor
Washington, D.C.

Dr. Mary Ellis, Director
Technical Education Research
Center
Washington, D.C.

Dr. Paul L. Gardner
Counseling & Career Guidance
Officer
Washington, D.C.

Dr. Lee Hardwick
Associate Commissioner
U.S. Office of Education
Washington, D.C.

Dr. L. D. Haskew, Professor
University of Texas
Austin, Texas

Leonard J. Haverkamp
Wilson & Company
Oklahoma City, Oklahoma

Dr. Howard Hjelm
Acting Associate Commissioner
National Center for Education
and Development
Washington, D.C.

Mrs. Elizabeth Koontz
Director of Womens' Bureau
U. S. Department of Labor
Washington, D.C.

Dr. J. J. MacAllister
Associate Professor & Director
Hotel & Restaurant Administration
Oklahoma State University
Stillwater, Oklahoma

Dr. Howard Mathews, Director
Division of Manpower Development
and Training
Department of HEW
Washington, D.C.

Dr. Robert Taylor, Director
Center for Vocational and
Technical Education
Ohio State University
Columbus, Ohio

State Level

Jack Boyd, Director
Health Education
Oklahoma City, Oklahoma

Vern Childers
General Motors Training Center
Oklahoma City, Oklahoma

D. Clancy, Manager
Industry & Labor Relations
Western Electric Company, Inc.
Oklahoma City, Oklahoma

Dr. D. D. Creech, President
Northeast Oklahoma A&M Junior College
Miami, Oklahoma

Tom English
Community Action Program of
Oklahoma City & County Inc.
Oklahoma City, Oklahoma

Tom Fleig, Vice-President
American Airlines
Tulsa, Oklahoma

Don Greves
Sequoyah Carpet Company
Anadarko, Oklahoma

Wesley Hobbs, Assistant Director
Academic Affairs
Oklahoma State Technical Institute
Okmulgee, Oklahoma

Mrs. Hugh R. Hughes
Cushing
Oklahoma

E. R. Jeffers, Supervisor
State Accrediting Agency
Oklahoma City, Oklahoma

Cooper Lyon, President
The Anna Maude Cafeteria
Oklahoma City, Oklahoma

Dr. Don Owen, President
Cameron State Agriculture College
Lawton, Oklahoma

Monte Reese
Secretary-Manager
Oklahoma City Chamber of Commerce
Oklahoma City, Oklahoma

Dr. Seward E. Robb
Oklahoma Economic Development
Foundation, Inc.
Norman, Oklahoma

Guy Robberson, Superintendent
Lindsay School System
Lindsay, Oklahoma

Gene Rochelle
President of OEA
Lawton, Oklahoma

John Steiger, President
State School Board
Bartlesville, Oklahoma

Local Level

J. R. Baker, Works Manager
U. S. Gypsum, Company
Southland, Oklahoma

Charles Bish
Hobart
Oklahoma

Mayor L. A. Black
Enid
Oklahoma

Dr. Sizemore Bowlan
Vocational Director
Oklahoma City Public Schools
Oklahoma City, Oklahoma

Jill Boyd
FHA State President
Warner, Oklahoma

Ed Brown, Director
Tulsa Skills Center
Tulsa, Oklahoma

John Burwell
Burwell Hardwood Lumber Company
Idabel, Oklahoma

Dr. A. B. Childress
Dean of Men
Northwest State College
Alva, Oklahoma

F. G. Drummond
Hominy
Oklahoma

Dr. Joe Glover, Superintendent
Woodward
Oklahoma

The Honorable William J. Gooden
State Representative
Kingfisher, Oklahoma

G. L. Graves
Director of Personnel
Tinker Air Force Base
Oklahoma City, Oklahoma

Paul Huffman
Arnett Drug Company
Arnett, Oklahoma

James Roy Johnson
Vocational Agriculture Teacher
Haskell, Oklahoma

Dr. Charlyce King
Associate Professor
University of Oklahoma
Norman, Oklahoma

Wesley Kirk
Executive Director
Opportunity Industrial Center
Oklahoma City, Oklahoma

Don Lawrence, Manager
Lawrence Dry Goods
Kingfisher, Oklahoma

Roy Mays, Vice President
Continental Oil Company
Ponca City, Oklahoma

Ellis Nickle
Equitable Life Assurance
Society of United States
Cherokee, Oklahoma

John Patton, D.D.S.
Stillwater
Oklahoma

Dale Perrymore, Vice-President
DECA
Stillwater, Oklahoma

Dr. Alfred M. Philips, President
Tulsa Junior College
Tulsa, Oklahoma

Dr. Gene Pingleton
Superintendent of Schools
Stillwater, Oklahoma

G. R. Sanders, Personnel Manager
Dayton Tire & Rubber
Oklahoma City, Oklahoma

Claude Todd, President
Stilwell Canning Company, Inc.
Stilwell, Oklahoma

Mrs. Francis Waddle
Executive Director
Oklahoma Board of Nurse Registration
and Nurse Education
Oklahoma City, Oklahoma

Jack M. Weaver
City Planner
Altus, Oklahoma

Betty Williams, Principal
Harmony Elementary School
Oklahoma City, Oklahoma

Lynn Worthen, General Manager
Marietta Sportswear
Marietta, Oklahoma